

C E R T I F I E D

Ref: 552-OD-268

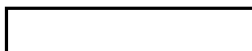
10 November 1965

STAT



Progress Report - October 1965
Projects 552 and 552A

Gentlemen,

Enclosed are three (3) copies of  Progress
Report on Projects 552 and 552A for the period October 1965 and
Customer Review (552-CD-140) dated 29 October 1965.

STAT

Very truly yours,



STAT

Vice President - Operations

LHB/de

Enc: (3) P.R.
(3) C.R.

Cert. #743912

Declass Review by
NIMA/DOD

PROGRESS REPORT
For
VERSATILE, HIGH PRECISION STEREO
POINT TRANSFER DEVICE

Period Covered: October 1965
Dated: 9 November 1965
Job No.: #552, #552A
Document No.: OD-266

PROGRESS REPORT
For
VERSATILE, HIGH PRECISION STEREO
POINT TRANSFER DEVICE

This month we have almost completed updating assembly motions for the 552 and 552A, with the remaining work installing minor parts of the vacuum holddown mechanism, glass platens, and completing objective assembly turret lens centering and field lens installation.

OBJECTIVE ASSEMBLY

Work on 552 objective heads and point marking optics is underway to settle this problem area. There has been positive response from only one vendor who was kind enough to check the present dichroic beam splitter and proposed that some improvement is possible with better centering of laser reflection band about laser wavelength, broader visible transmission region removing transmission cut off in blue end. However, the fundamental need of very narrow reflecting band at laser wavelength has not been met. A possible alternative could be to shift laser wavelength sufficiently out of visible spectrum, say to 1.06 micron, and alter dichroic accordingly. However, problems of this change would have to be searched out in further analysis and experiments with system. Since the dot reticle would then have no reflective means in the cube for visible light an arrangement with a second reflective surface in the cube would have to be made, possibly like the semi-reflecting film used in the 552A. However, this film would have to be modified to prevent reflection at laser wavelength, and therefore, avoiding a "ghost". Aside from optical considerations, modification of laser system will be required to assure required output and repetition rate.

Optical adjustment of eyepiece and objective assemblies are nearly complete on Stereo Viewer to be shipped next.

System checkout is expected to be completed during next reporting period. It is also expected that equipment delivery may be possible by end of November. Customer acceptance motions should be contemplated for that period.

ENCODER - COUNTER SUBSYSTEM

Meeting with customer has been arranged for early November to make decisions regarding equipment needed to complete encoder installation on 552 system.

Work for Next Reporting Period

- 1) Complete updating of all machines.
- 2) Complete debugging, acceptance work for 552A #102, prepare to ship.
- 3) Continue debugging 552 #101.

9 November 1965
552 - CD-140
WWB:rf

CUSTOMER REVIEW

DATE: 29 October 1965

STAT ATTENDEES:

1) 552 Glass Platens

What has been done to implement removal of macro-grooves? We stated nothing has been done to improve problem because of financial limitations of project.

2) Troubles with 552A #101 so far:

Center holddown spring edge came loose from arm, customer cemented in place.

Short length of 9 1/2 inch film would not holddown, apparently because of leak at read holddown and that it could not be tensioned properly.

Otherwise, system is running satisfactorily and meeting customer's needs.

3) Submitted informal quotation for image alternator and film drive assist. We will send a letter proposal soon describing the latter more fully, and confirming image alternator prices.